

Name \_\_\_\_\_

### Types of Bonding Worksheet

What is an ionic bond?

How do atoms react to form positive and negative ions? Explain with a picture.

What is a polyatomic ion?

What is a covalent bond?

Fill in the following blanks

1. Ionic bonds form between \_\_\_\_\_ and \_\_\_\_\_. They also form between \_\_\_\_\_ and \_\_\_\_\_.
2. Covalent bonds form between \_\_\_\_\_.
3. Bonds with a big difference in electronegativity are \_\_\_\_\_. Bonds with intermediate difference in electronegativity are \_\_\_\_\_, and bonds with no difference in electronegativity are \_\_\_\_\_.

For the following compounds check off if the compounds contain ionic or covalent bonds. If the bonds are covalent, check off if they are polar or nonpolar (use the electronegativity table on the back of this sheet to determine polarity). If the bond is polar, indicate the direction of the dipole.

Compound	Ionic	Covalent	Nonpolar	Polar	Direction of Dipole
Ex: H <sub>2</sub> O		✓		✓	O-H
BaCl <sub>2</sub>					
SO <sub>2</sub>					
LiF					
CN <sup>-</sup>					
I <sub>2</sub>					
Fe <sub>2</sub> S <sub>3</sub>					
PH <sub>3</sub>					
NO					